

ROYALFIL GS 80 B6 (E80T1-B6 C)

AWS A / SFA 5.29 E 80T1-B6 C EN ISO 17634 A TCrMo5RC3H5

Applications

Royalfil GS-80B6 is used for welding of similar composition of Cr – Mo steel and other creep resistance steel. It is also used for welding of high temp. & Pipe steel for oil refineries, power plant, chemicals plant, fertilizers Industries. Materials to be welded are plate ASTM A387 Grade 9, Pipe / Tube ASTM A 335 Grade 9, ASTM A234 Grade WP9 (fittings), ASTM A199 GradeT9, Forgings ASTM A182 Grade F9, ASTM A336 Grade F9, Cast ASTM A 217 GradeC12

Characteristics on Usage

Royalfil GS-80B6 is flat and horizontal position low alloy Rutile base flux cored wire depositing approx 5% Cr, 0.50% Mo weld metal with CO₂ shielding. The slag coverage is complete easily removable. The weld metal is radiographic quality and has creep resistance up to 650°C

Welding Positions



Recommended Stick Out
15-20mm

OutShielding Gas

Carbon Dioxide (CO₂) shielding
Gas Flow: 15-20 Lit/Min.

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%
0.05-0.12	1.25 Max	1.00 Max	0.030 Max	0.040 Max
Cr%	Mo%			
4.0-6.0	0.40 - 0.65			

Mechanical Properties Of Weld Metal

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
550-690	470-530 Min	15-24 Min

Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)
1.20	180-250	26-30
1.60	210-280	26-30

Packing

15 kgs. Vacuum packed plastic spool